

general management plan development concept plan

## SPRINGFIELD ARMORY



NATIONAL HISTORIC SITE / MASSACHUSETTS

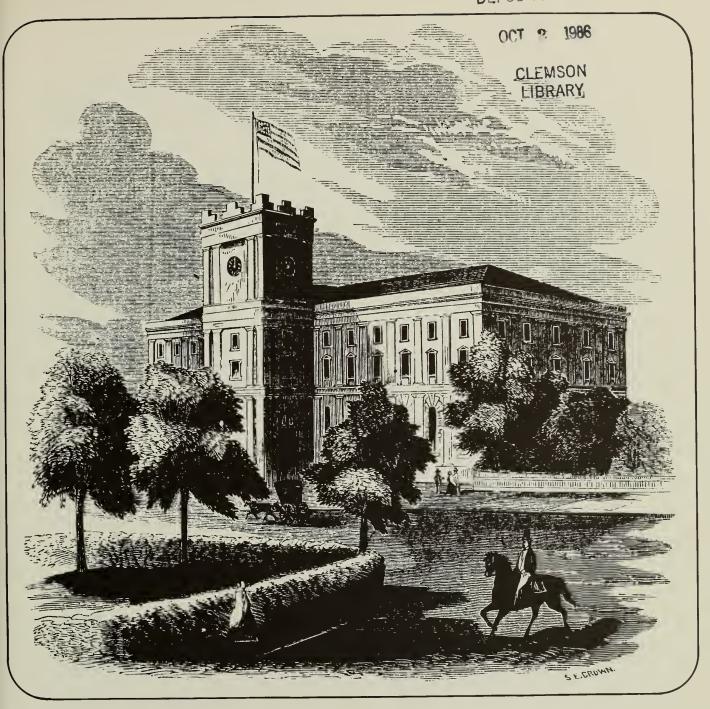


### RECOMMENDED:

W. Douglas Lindsay, Jr.
 Superintendent, Springfield Armory National Historic Site
 Kenneth L. Raithel
 Assistant Manager, Eastern Team, Denver Service Center

### APPROVED:

Herbert S. Cables, Jr. Regional Director, North Atlantic Region July 29, 1986



GENERAL MANAGEMENT PLAN / DEVELOPMENT CONCEPT PLAN

### SPRINGFIELD ARMORY

NATIONAL HISTORIC SITE / MASSACHUSETTS

Digitized by the Internet Archive in 2012 with funding from LYRASIS Members and Sloan Foundation

### CONTENTS

INTRODUCTION 1 Significance of the National Historic Site 1 Management Objectives 3
THE PLAN 6 Management Zoning 6 Cultural Resource Management 9 Interpretation and Visitor Use 10 Interpretation 10 Handicap Access 11 General Development 11 Park Operations 12
THE ENVIRONMENT 16 Cultural Resources 16 History of the Armory 16 Physical Layout of the Armory 17 Resources Administered by the National Park Service 18 Resources Administered by Springfield Technical Community College 21
Natural Resources 22 Topography 22 Soils 25 Plant and Animal Life 25 Climate 25 Air Quality 26
The Park and Its Environs 26 Regional Setting 26 Land Use 27 Socioeconomic Characteristics 27 Recreation Resources 28 Visitor Use of the Historic Site 28
APPENDIXES Appendix A: Legislation 31 Appendix B: Letter from Springfield Technical Community College 33 Appendix C: Finding of No Significant Impact 34
SELECTED BIBLIOGRAPHY 41
PLANNING TEAM AND CONSULTANTS 43

### MAPS

Regional Setting 2
Vicinity 4
Management Zoning 7
Development Concept Plan 13
Archeological Resources 19
Existing Conditions 23

### INTRODUCTION

Springfield Armory was the center for the development and production of U.S. military small arms from 1794 until its deactivation in 1968. It was designated by Congress as a national historic site in 1974. In 1978 the National Park Service acquired a portion of the former armory site, and the remaining portion is administered by Springfield Technical Community College.

The purpose of this <u>General Management Plan/Development Concept Plan</u> is to establish long-range strategies for future programs, facility use, and management actions at Springfield Armory National Historic Site. The plan will provide the minimum level of development and will preserve the armory as it appeared in 1968. It will also ensure the preservation and interpretation of the arms collection--the primary resource at the site. In addition efforts will be made to relate the story and significance of the armory to other structures in the city of Springfield. The park's management objectives and the concerns of the college have been considered in the development of the plan.

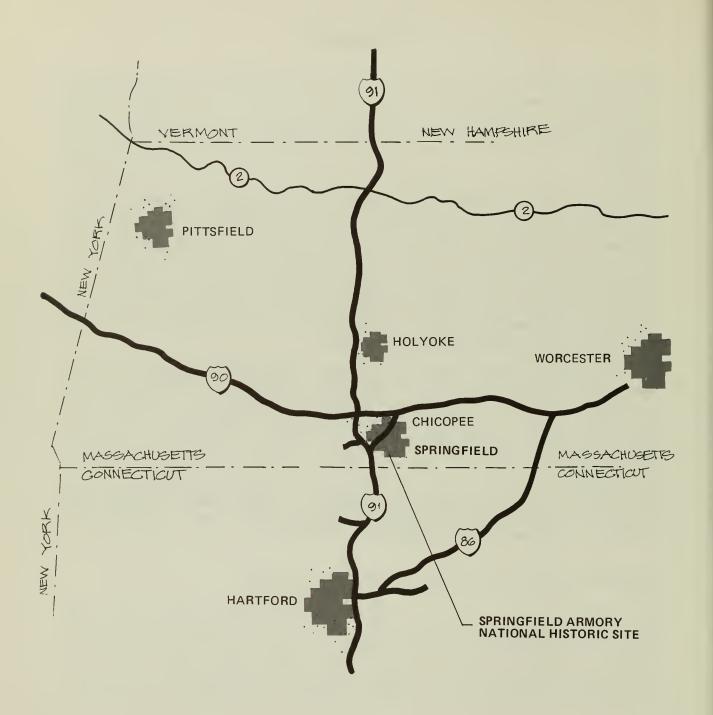
This document complies with the policies, regulations, executive orders, and laws affecting activities at the national historic site, and it will serve as both a manager's guide for meeting the objectives established for Springfield Armory and a public statement of NPS intentions. The plan is expected to be valid for the next 10 to 15 years, but portions of it may be amended from time to time to address emerging needs or problems.

The National Park Service and Springfield Technical Community College will continue to work together to manage the armory site, to execute the mandates of the site's authorizing legislation, and to meet the objectives of both the college and the National Park Service.

### SIGNIFICANCE OF THE NATIONAL HISTORIC SITE

Springfield Armory National Historic Site consists of 55 acres near downtown Springfield, Massachusetts, and it commemorates the important role this armory played in the nation's military and industrial history. From its inception in 1777 through 1968, the armory was a center for small arms storage, research, development, and manufacture. It held an international reputation for quality products and industrial innovations.

The national historic site was established by Congress in 1974 to promote an understanding of government arms manufacturing and the historic significance of the armory itself (see appendix A). It is today the home of one of the largest arms collections in the world. Most experimental models produced at the armory, as well as thousands of pieces collected from around the world for research and development purposes, are displayed at the site. The collection is on indefinite loan from the Department of the Army.





## regional setting

SPRINGFIELD ARMORY NATIONAL HISTORIC SITE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

458 | 20,006 A DSC MAY 84 The physical layout of the buildings took shape during the 1800s, when the idea of successive commanding officers was to build a "Grand National Armory." Their intent was to create a majestic federal complex that reflected an aura of national strength and solidarity. The national historic site complex, known as Armory Square, consists of several 19th century brick structures, a central green, and an iron fence that surrounds the entire site. The most imposing structure is the main arsenal, which was completed in 1850 and currently houses the arms collection. In addition to the structures in Armory Square, the original armory complex also included Federal Square, the Watershops, and test-firing sites located throughout the city and adjacent communities.

Springfield Armory has been designated a national historic landmark, and it is listed on the National Register of Historic Places.

### MANAGEMENT OBJECTIVES

The following management objectives provide a framework for preserving park resources, integrating the park into the local environment, and accommodating public use. They have been developed to reflect NPS management policies and the concerns of Springfield Technical Community College.

### Cultural Resource Preservation

Preserve, restore, and protect the historic resources associated with arms manufacturing at Springfield Armory National Historic Site, in accordance with preservation laws, executive orders, and policies; inventory and evaluate all prehistoric and historic archeological resources within the boundaries of the historic site.

Cooperate with the commonwealth of Massachusetts in the protection, preservation, and use of the complex of historic buildings at Springfield Armory National Historic Site, including the green.

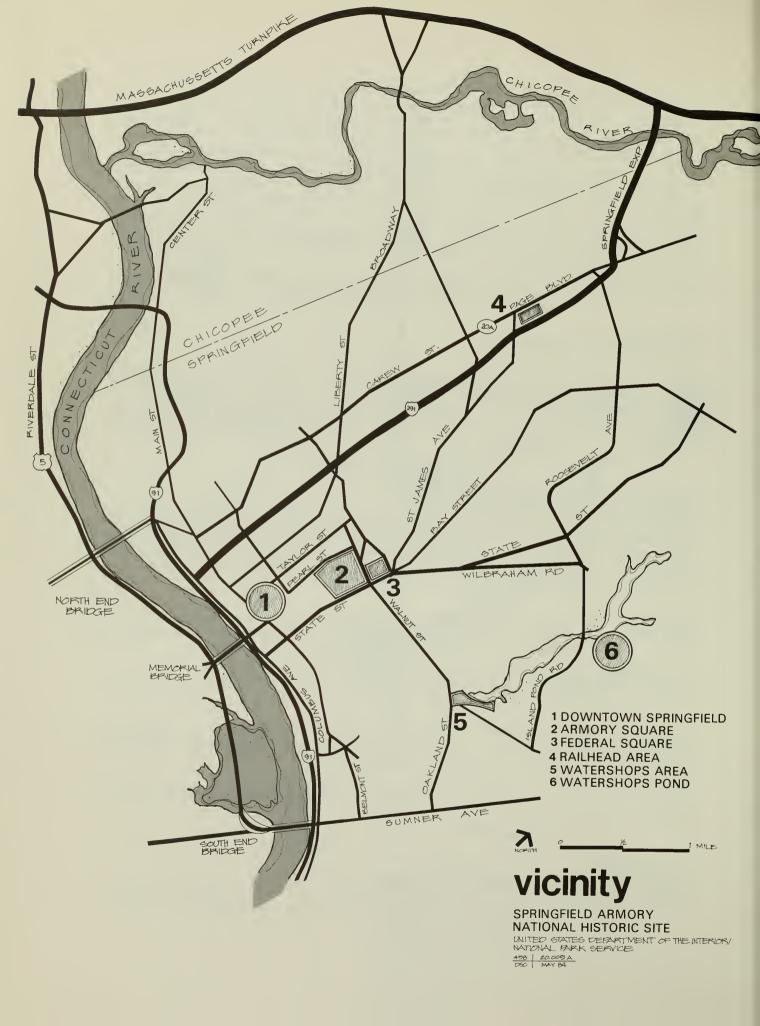
Maintain the terrain and vegetation in a general appearance and character that are compatible with the site's historic use.

Ensure that adaptive uses of the site's historic buildings are compatible with the primary purpose of the area and are consistent with the preservation of historic values and resources.

Ensure that the arms collection is secure and is adequately preserved and displayed.

#### Interpretation

Foster an understanding and appreciation of the nearly 200-year history of government armament manufacturing at Springfield through



interpretation of the historic significance of the armory complex and the vast arms collection.

Explain to visitors the significance of Springfield Armory to industrial history in terms of the concepts of interchangeable parts, assembly line production, and quality control.

Use the armory's renowned weapons collection to show the evolution of military small arms.

Provide for various levels of visitor interest, ranging from the casual tourist to the arms enthusiast and scholar.

Encourage the development of programs for schools, cultural and historical groups, senior citizens, and handicapped visitors.

### Development

Ensure that all developments for park administration, visitor use, and college use are safe and consistent with other park objectives and NPS policies.

### THE PLAN

The overall approach of the general management plan for Springfield Armory National Historic Site is to maintain the armory as it was in 1968, when it was deactivated as a military installation. Conditions existing in 1968 will be restored and maintained as nearly as possible, and any needed replacement of structural elements for maintenance purposes will duplicate those conditions. The successful implementation of the plan will require continued cooperation with Springfield Technical Community College, and a cooperative agreement has been prepared for this purpose. The general management plan itself is presented in five main sections: management zoning, resource management, interpretation and visitor use, general development, and park operations. Estimated costs are shown in table 1 at the end of this section.

### MANAGEMENT ZONING

The portion of the national historic site that is managed by the National Park Service will be designated as a historic zone, in accordance with existing development, park management objectives, and legislative mandates. This classification emphasizes the restoration, preservation, protection, and interpretation of cultural resources. Four subzones will be used to further define management emphasis and will limit options for future park management and use.

Adaptive Use Subzone--This subzone will include the main arsenal, the commanding officer's house and adjacent garage, and the gatehouse on the corner of State and Byers streets. Exterior building treatment in this subzone will be limited to preservation maintenance, as defined in the NPS "Cultural Resources Management Guidelines" (NPS-28). Except for the main staircase in the main arsenal, the structures may be modified on the inside only for adaptive use; this should not affect the exterior appearance.

Landscape Modification Subzone--This subzone will include those portions of the historic armory landscape to be restored to the general appearance of their 1968 condition. This action will require the regrading of portions of the site as well as the planting of trees to re-create the historic appearance of the armory. After restoration this subzone will be preserved in its restored condition.

Historic Access and Circulation Subzone--This subzone will include all roads, parking lots, and walkways. The locations of these roads and paths will remain the same, and they will be maintained to preserve the existing appearance. Surfacing materials may be replaced as necessary.

Landscape Management Subzone--All remaining portions of the armory landscape will be included in this subzone, and they will be preserved and maintained in their present condition.

STREETS GAT

FEDERAL STREET NORTH GATE

MAIN COLLEGE

SATE

HISTORIC ZONE (ADMINISTERED )

ADAPTIVE USE SUBZONE

LANDSCAPE MODIFICATION SUBJONE

HISTORIC ACCESS AND CIRCULATION SUBZONE

LANDSCAPE MANAGEMENT SUBZONE

COLLEGE-ADMINISTERED AREA

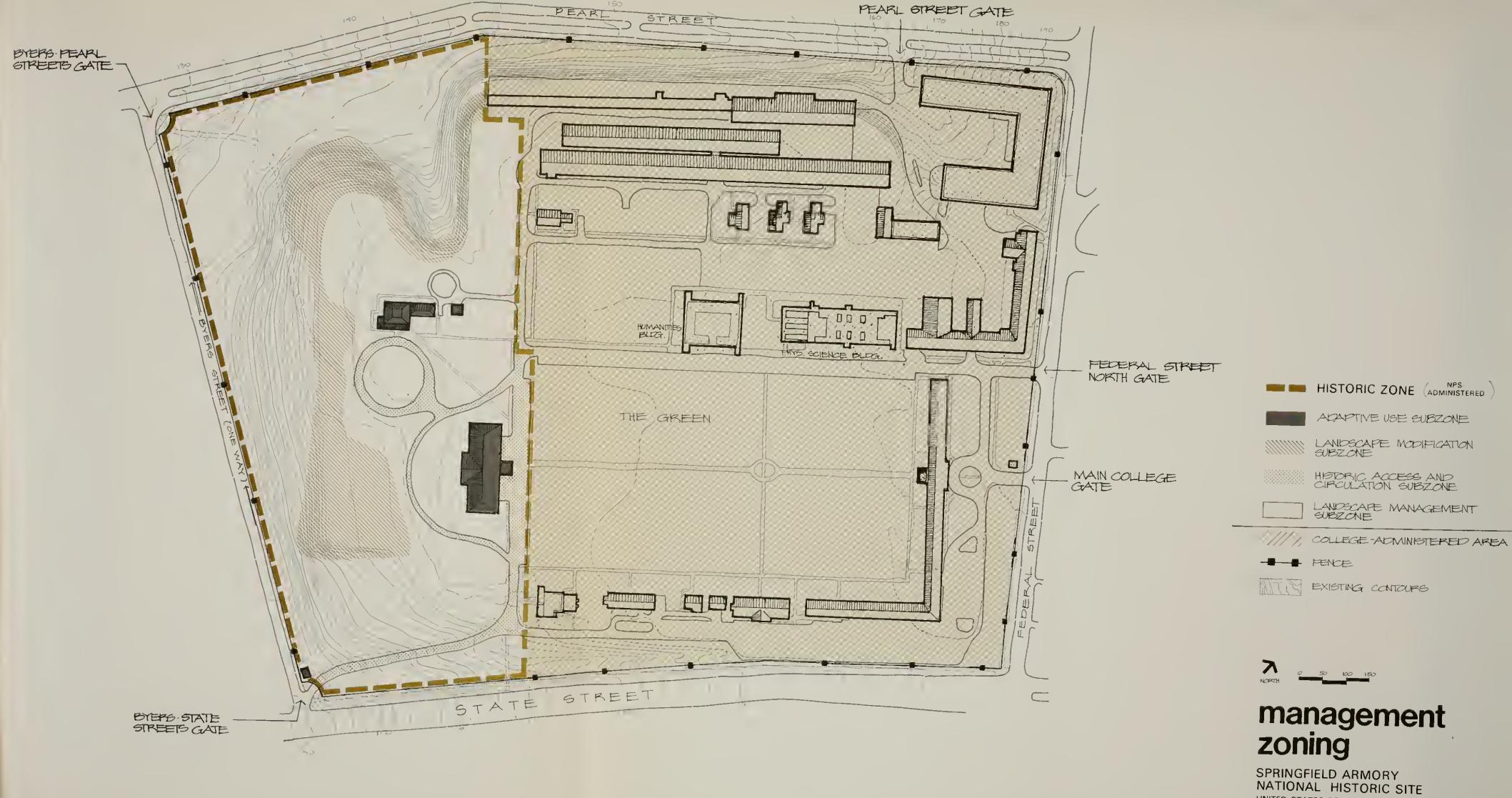
EXISTING CONTOURS



# management zoning

SPRINGFIELD ARMORY
NATIONAL HISTORIC SITE
UNITED STATES DEPARTMENT OF THE INTERIOR /
NATIONAL PARK SERVICE

458 20,010C DSC JUNE 86



UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

450 20010C

### CULTURAL RESOURCE MANAGEMENT

The National Park Service will preserve the cultural resources of the national historic site. Preservation is defined as the application of measures to sustain the existing terrain and vegetative cover of a site and the existing form, integrity, and material of an object or structure (NPS-28). (This does not include the reconstruction or restoration of lost features or the removal of additions.)

Present NPS uses of buildings will continue, and the major focus will be on the main arsenal, where the arms collection is stored and exhibited. The arms collection will be preserved, maintained, and interpreted as outlined in the approved "Collections Management Plan" (NPS 1977) and the "Interpretive Prospectus" (NPS 1980). A small audiovisual orientation area will be partitioned off from the rest of the museum, and this area will also be used for special lectures and demonstrations.

The commanding officer's house will retain its administrative and maintenance headquarters functions, and currently unused space will be leased to nonprofit groups or community organizations. The adjacent garage will continue to be used as a maintenance shop and an equipment storage area. The commanding officer's gardens will be maintained in their present condition. The NPS portion of the historic fence and gates will be stabilized, and missing sections will be replaced. The gatehouse will be stabilized and will remain vacant, although it may be used periodically for on-site interpretation.

The existing landscape will be modified to more closely resemble its condition in 1968. In 1969 the landscape was altered during the construction of ballfields. Fill was added and steeper slopes facing Byers and Pearl streets were created, resulting in maintenance and erosion problems. Also several trees were removed during the regrading effort. Landscape treatment will consist of rolling back the crest of the slopes to minimize erosion and to more closely resemble the historic contours. Drainage improvements will be made, and vegetation will be planted to reduce erosion. Army maps of trees existing before the 1969 grading project will be used to determine the original species and their locations. As existing trees die they will be replaced by species of similar mass and form. The ravine just north of the commanding officer's house will be cleaned up. Erosion control measures will be undertaken as needed. The walks and paths will be improved and maintained.

The National Park Service will provide technical preservation and restoration assistance to Springfield Technical Community College on request. The master armorer's house, which is owned by the college, will be treated like other college structures and will continue to be adaptively used.

An archeological inventory and evaluation consistent with the requirements of Executive Order 11593 will be conducted. Until this is completed, no ground-disturbing activities will be undertaken before evaluation by an archeologist.

The historic data section of a historic resource study was completed in 1978, along with a base map. Additional data needed to comply with NPS-28 will be programmed.

### INTERPRETATION AND VISITOR USE

### Interpretation

Interpretation at Springfield Armory National Historic Site will emphasize the armory's importance in government arms manufacturing, its role in industrial history, and its contribution to the development of the city of Springfield. Interpretation will be consistent with the approved "Interpretive Prospectus," which will be implemented in phases to meet demand. The interpretive program will address the interests of three general audiences: casual visitors, school groups, and arms enthusiasts. An audiovisual presentation at the main arsenal, exhibits (both within the arsenal and at outdoor wayside information areas), and a self-guiding tour booklet will be used.

The main arsenal will be the focal point of the park. The museum will concentrate on the history and significance of the site and on the arms collection. The museum will be a major information point, and various handout materials will be distributed.

The commanding officer's house and gardens, the gatehouse and historic gate, paths, and the historic terraces will all be interpreted by means of wayside exhibits and a self-guiding tour booklet.

Visitors will be encouraged to tour the remainder of Armory Square, which is administered by the college. Features such as the master armorer's house, the green, the stables, the west arsenal, and the testing range will be interpreted in cooperation with the college by using the self-guiding tour booklet and wayside exhibits.

To give a true sense of the armory's importance, size, and complexity, visitors will also be encouraged to see the other facilities in the original army complex. A driving tour to Federal Square, the Watershops, and the railhead will be included in the self-guiding tour booklet.

Finally, interpretation at Springfield Armory will be coordinated with other major tourist attractions around the city of Springfield, such as the Basketball Hall of Fame and the Quadrangle.

Visitor use has been fairly stable over the last six years, with occasional fluctuations due primarily to local special events, such as the Boy Scout Jamboree (see the discussion of visitor use in "The Environment" section). The improved exhibits and expanded interpretation at Springfield Armory, along with additional tourist attractions sponsored by the local chamber of commerce, could increase visitation at the park, but not by a predictable amount.

### Handicap Access

The commanding officer's house requires modifications to provide for access by handicapped persons because it will be used for interpretive programs or leased for adaptive purposes. The main arsenal has already been made handicap accessible.

The major problem at the commanding officer's house is access to the first floor from the ground level, a distance that varies from approximately 48 to 70 inches. Access onto the east wing porch will be provided, with circulation through the wing to get to the main house. Either a vertical lift could be installed at the stairs (preferred), or a ramp could circle the east wing and parallel the parking circle behind the house, where handicap parking would be located. The ramp would cover the existing deteriorated stone steps.

For interior circulation door widths are adequate throughout the first floor, but thresholds will have to be beveled. Access to the basement or upper floors by handicapped individuals would require installation of some form of lift, resulting in significant alterations to the building fabric. If space within the building is leased, consideration of any interior lifts should wait until the needs of specific tenants can be analyzed.

Restrooms are of a conventional residential type, but generally small, narrow, and below handicap standards. Room 116 offers the best opportunity to provide an accessible restroom in the house. A combination of rooms 116 and 117 would allow for the construction of an acceptable unisex restroom. Installing a new bathroom would involve the removal of historic fabric, probably dating from original construction. This restroom solution would complement access at the wing, and it would provide another restroom for handicapped visitors at Springfield Armory besides those in the arsenal.

The implementation of these access proposals will probably be financed through cyclic maintenance programs or the NPS park rehabilitation and improvement program; therefore, the costs are not included in this document.

### GENERAL DEVELOPMENT

The adaptive use of existing structures will not require any new construction; instead the major development actions relate to landscaping. The two areas in need of landscape treatment are the steep slope facing Byers Street and the ravine to the north of the commanding officer's house. Approximately 3,000 cubic yards of fill will be removed from the crest of the slope facing Byers Street. Ground cover and drainage tiles will be used where necessary to stabilize the slope and reduce erosion. Topsoil will be retained and replaced after regrading. The disturbed areas will be seeded.

Landscape modifications to the ravine area will involve the removal of debris and possible regrading to restore the historic terraces. Approximately 2,000 cubic yards of debris and fill will be removed. The disturbed area will be planted to stabilize the slope.

Traffic routes will be adequately signed and marked to ensure proper traffic flow. The turning radii of several curves will be improved. Parking will continue to be provided in front of the main arsenal.

### PARK OPERATIONS

### Security

To ensure proper security at the armory, the National Park Service will continue to coordinate protective measures with the Federal Bureau of Investigation and the Springfield Police Department.

### Utilities

In 1978 when the National Park Service assumed ownership and management responsibility for the federal portion of the armory, all utilities were shared among the Armory Square structures. Recently the Park Service has installed independent heating and electrical service for the main arsenal and the commanding officer's house. The NPS structures will continue to be serviced by the site's central water system, which is supplied by three water sources and will provide backup water supply for fire protection. Sewage will continue to be disposed of through the city's sewage disposal system.

### Staffing

NPS staffing will require a total of 11 permanent employees (including the superintendent, chief of visitor services, curator, and chief of maintenance) plus five full-time equivalents (that is, less than full-time staff).

BYERS-PEAF GTREETS GA

### **MASTER** ARMORER'S HOUSE

CONTINUE ADAF USE BY COLLEG NPS TECHNICAL ASSISTANCE F STABILIZATION
MAINTENANCE

### LANDSCAPE

PESTORE HISTR TERRACES; P TREES IN HIST CONFIGURATIO

### COMMANDING OFFICER'S HO

CONTINUE ADM USE; LEASE UI PORTIONS

VISITOR ACCES IMPROVE TURN RADII

MAIN ARSENA

PRESERVE, WITH USE OF INTERIOR

PARKING

- MAIN COLLEGE CONTINUE EXISTI GATE

**FENCE** 

STABILIZE AND DETERIORATIN

WALKS AND PA MAINTAIN AND IN

**GATEHOUSE** PRESERVE

FEDERAL STREET NORTH GATE

- VIGITOR ACCESS

COLLEGE-ADMINISTERED AREA

# FENCE

EXISTING CONTOURS

NPS-ADMINISTERED AREA



## development concept

SPRINGFIELD ARMORY NATIONAL HISTORIC SITE UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE 458 20,009C DSC JUNE 86

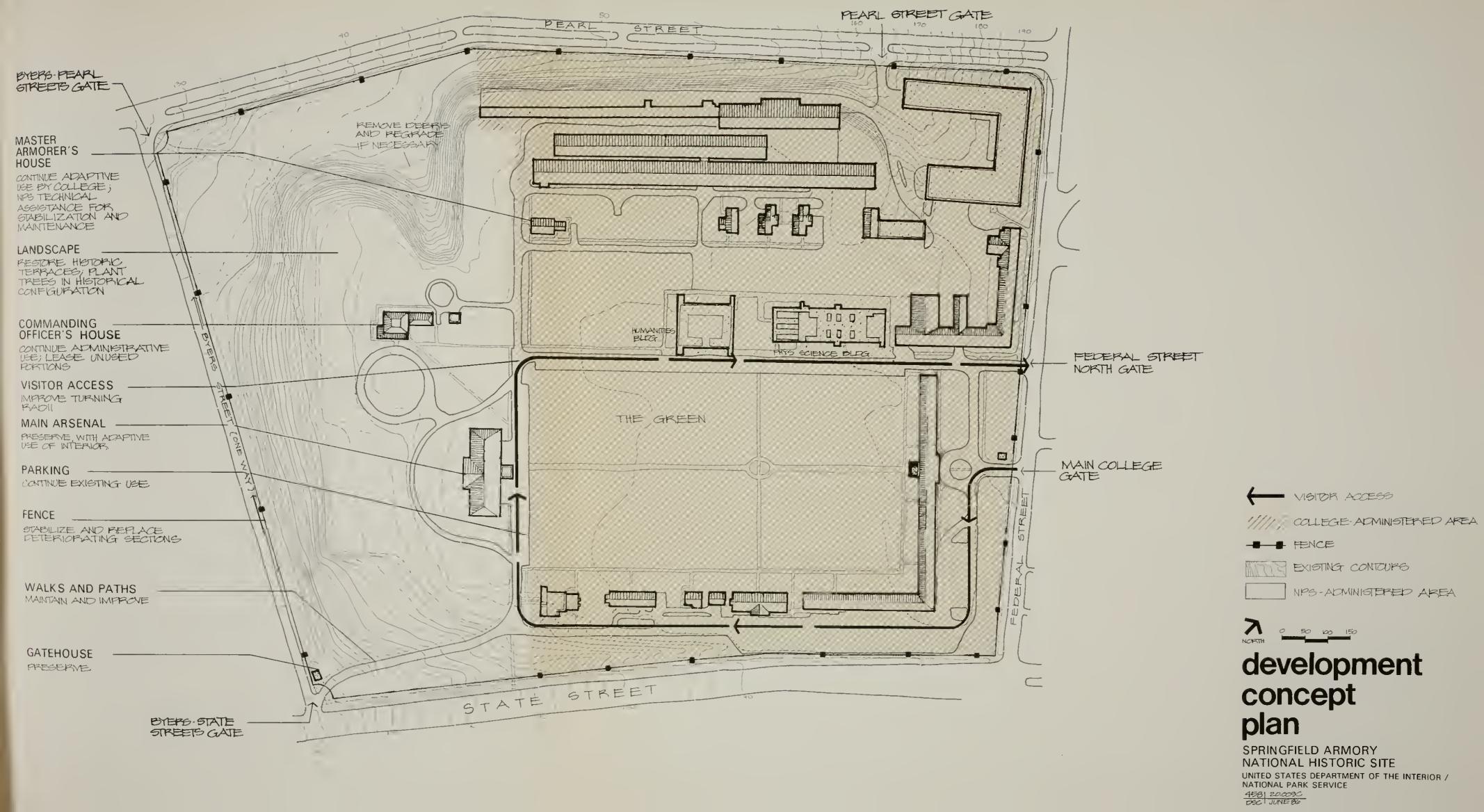


Table 1: Construction Gross Cost Estimates (1984 dollars)

Cultural Resources  Main arsenal preservation  Commanding officer's house preservation  Garage preservation  Gatehouse stabilization  Fence stabilization and preservation	\$3,796,000 762,100 7,300 36,500 239,400
Subtotal	\$4,841,300
Interpretation/Visitor Use Interpretive media for main arsenal (see "Interpretive Prospectus") Wayside exhibits (both NPS and non-NPS lands) Self-guiding tour pamphlet Directional signs (5)	\$2,379,800 43,800 8,800 7,300
Subtotal	\$2,439,700
General Development Slope modification/erosion control Revegetation of disturbed areas Replanting of trees and shrubs (1968 configuration) Installation of drainage tiles Access road upgrading (increased turn radii)	\$ 221,900 10,200 73,000 14,600 29,200
Subtotal	\$ 348,900
Gross Construction Cost	\$7,629,900

Note: Phasing period is 15 years.

### THE ENVIRONMENT

### CULTURAL RESOURCES

For nearly 200 years Springfield Armory occupied a unique position in American history. As a center for arms research and development, the armory held an international reputation for its quality products and its innovative contributions to the industrial revolution.

### History of the Armory

The history of Springfield Armory began with the American Revolution. In 1777 Gen. George Washington selected Springfield for a magazine and laboratory for the manufacture of ammunition and the storage of weapons. The specific site was a level, sandy plain ending in an abrupt cliff overlooking the town. Unwanted by farmers, more easily defensible than surrounding areas, and near the growing cluster of firearms manufactories, the site could not have been more appropriate.

In 1794 Congress formally established the national armory, and from that time the armory experienced continual growth. The armory also contributed to the growth of Springfield as a major industrial center in western Massachusetts.

During the early 19th century Springfield Armory played an important role in the development of the principle of interchangeability of parts, an essential concept in the modern assembly line techniques of American industry. In 1822 Thomas Blanchard, an armory workman, devised a machine for turning gun stocks. This machine proved a forerunner of machines for making other standardized gun parts.

From 1794 to 1861 Springfield Armory and the armory at Harpers Ferry, Virginia, supplied arms to U.S. armed forces. After the Harpers Ferry armory was destroyed during the Civil War, Springfield was the only producer of government-made small arms until 1904, when the Rock Island arsenal began production in Illinois.

The rifles developed, tested, and produced at Springfield Armory included the .58 caliber rifle carried by Union troops during the Civil War, the .45/70 caliber rifle and carbine used by the U.S. Army in Indian wars in the West, the .30/70 caliber Krag-Jorgenson rifle used in the Spanish-American War, and the "03" Springfield used in World War I. The M-1 rifle issued to U.S. forces in World War II was developed by an armory employee, John C. Garand. The last military rifle produced at the armory was the M-14 in the 1960s.

### Physical Layout of the Armory

After the formal establishment of the armory, buildings were constructed and modified to suit the needs of the growing installation. Col. Roswell Lee, assuming command in 1815, inherited an industrial area considered large for its day. Lee recognized the potential grandeur of the site and began the development of a "Grand National Armory." While each of Lee's successors applied it differently, this central theme is essentially the story of the site. Strength, solidarity, and an aura of national might would always show in its features.

The third commanding officer of the armory, Lt. Col. James W. Ripley, generated changes in the physical layout of Armory Square that were even more dramatic than Roswell Lee's. Ripley, adding to a visual concept initiated by Lee, expanded the magnitude and created a majestic federal establishment.

Work on the main arsenal building started in late spring 1847. Its size, combined with its position between the master armorer's house and the paymaster's house at the end of the green, made the building one of the most imposing in the entire complex. When construction was completed three years later, the main arsenal formed a focal point at Armory Square. Also begun in 1847 were plans for an iron fence to serve both utilitarian and symbolic needs. Actual construction of the fence did not start until 1852 and continued until 1864.

The steep slopes to the north and west of the main arsenal and the commanding officer's house were regraded during Ripley's tenure. His plans for terracing the area are still the most effective means of controlling the pervasive erosion caused by the seepage of springs from the face of the bluffs.

From the end of the Ripley administration in 1854 to 1968 there were no major construction projects at the armory. The master armorer's house was moved to its present location sometime between 1877 and 1882.

The general lack of physical changes did not, however, preclude major technological changes or the coming and going of thousands of workers and soldiers. The armory met the challenge of ordnance manufacture from the Spanish-American War through the Vietnam War. In its last years as an active military installation, the armory served as the U.S. Army's principal research and development center and pilot manufactory for small arms. When phased out in 1967-68, the armory was the federal government's oldest manufacturing arsenal.

Because the Springfield Armory National Historic Site is under the jurisdiction of both the National Park Service and Springfield Technical Community College, the following description reflects this division of administration.

### Resources Administered by the National Park Service

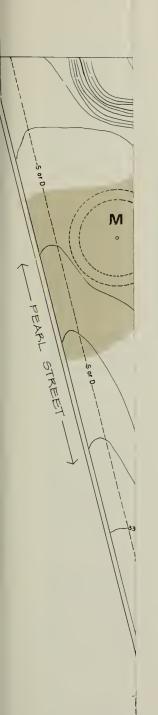
Potential Archeological Resources. The topography of the armory site is a level plain that ends in a bluff overlooking the Connecticut River valley, and several springs are located throughout the area. Consequently, the site is more easily defensible than any surrounding areas (NPS 1978), suggesting an ideal location for hunting, camping, and occupation by prehistoric populations. It is possible that archeological evidence of prehistoric use of the site could be recovered.

Historical documentation for the Springfield Armory indicates the probability of recovering archeological resources that could be used to identify and interpret various previous structures and activities associated with the site since at least 1786. Although major development at the site did not begin until 1794, some sort of armory or arsenal activity took place there constantly since 1777. Before 1777 it was used by the community of Springfield as a training field.

Sites with potentially significant archeological resources have been identified through historical references to former structures, deposits reflecting the activities associated with these structures, and evidence now visible on the ground surface indicating previous activities or structures. The locations of 12 former structures are shown on the Archeological Resources map, in addition to the sites of potential remains of early water and sewer structures, various outbuildings, and three private dwellings, all of which could be investigated. Archeological resources besides those described here could be expected, even though not now exposed or documented.

Arms Collection. The arms collection is one of the largest of its kind in the world. Since the late 1880s small arms from other installations have been collected and deposited at the armory. Most experimental models produced at the armory also went into the collection, as well as thousands of pieces from foreign countries used in experimental arms development. The armory endeavored to collect a wide variety of military small arms so that they could be used for research and development of small weapons as well as for academic studies of warfare as an instrument of national policy. The arms collection, which now runs the gamut from a 14th century hand cannon to an electric revolving cannon, is on indefinite loan to the National Park Service under a 1978 cooperative agreement with the Department of the Army. The collection is currently estimated to have a market value between \$10 million and \$20 million.

Landscaping. The landscape of the historic site reflects design concepts and philosophies that have developed throughout the history of the site. The formal orientation of the mid 1800s is reflected by the classic tree plantings around the green and the remains of the formal rose garden near the commanding officer's house. More informal naturalistic layouts are characterized by recent unstructured tree plantings throughout the green.



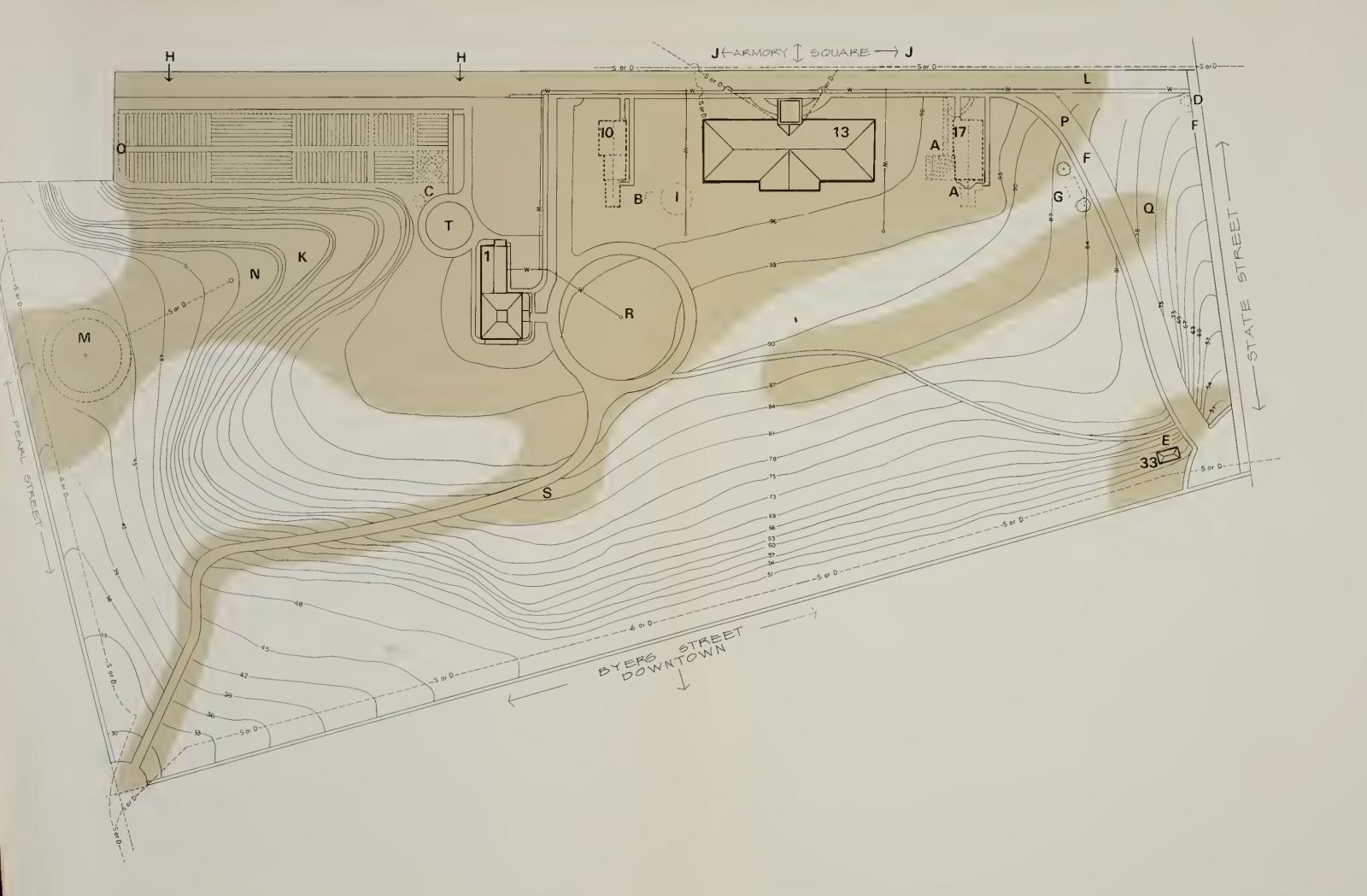
ADDITION TO BUILDING 17, CIRCA 1877 В ICEHOUSE, CIRCA 1864 C ICEHOUSE, CIRCA 1864 D SENTRY BOX, CIRCA 1864, REMOVED 1875 GATEHOUSE, 1875-1905 (AT SITE OF BUILDING 33) ENTRANCE POAD, 1875 (TRACE IS APPROXIMATE) G MONUMENT, CIRCA 1877-1910 GREENHOUSES, CIRCA 1902-1958 POOL AND FOUNTAIN ARMORY SQUARE TERRACING ENTRANCE ROAD UNTIL 1875 M FOUNTAIN AND FOOL, CIRCA 1877-1909 N FOUNTAIN (POSSIBLY MEANING A SPRING), CIRCA 1877-1909) O SCHOOLHOUSE PAY OFFICE Q SOLOMON HOTON'S STORE R FOUNTAIN, CIRCA 1851 S "CATHOLIC LOT" ROSE ARBOR COMMANDING OFFICER'S HOUSE BUILT 1845 - 1847 BLDG. 1 MASTER ARMORER'S HOUSE BUILT 1833, MOVED 1880 BLDG. 10 BLDG. 13 MAIN ARGENAL: BUILT 1845-1850 PAYMAGTER'S QUARTERS: BUILT 1833, MOVED 1880 , DESTROYED 1968 BLDG. 17 GATEHOUSE, 1908, REPLACED HEXAGONAL STRUCTURE IN THE SAME LOCATION BLDG, 33 NO DOCUMENTARY INDICATIONS OF ARCHEOLOGICAL RESOURCES DOCUMENTARY INDICATIONS OF ARCHEOLOGICAL RESOURCES -W- WATERLINE -- SOFD-- SEWER OR DRAIN ---- NONEXTANT BUILDING SITE



# archeological resources

SPRINGFIELD ARMORY
NATIONAL HISTORIC SITE
UNITED STATES DEPARTMENT OF THE INTERIOR /
NATIONAL PARK SERVICE

458 20.004C DSC JUNE 86



A ADDITION TO BUILDING 17, CIRCA 1877

B ICEHOUSE, CIRCA 1864

C ICEHOUSE, CIRCA 1864

D SENTRY BOX, CIRCA 1864, REMOVED 1875

E GATEHOUSE, 1875-1905 (AT SITE OF BUILDING 33)

F ENTRANCE POAD, 1875 (TRACE IS APPROXIMATE)

G MONUMENT, CIRCA 1877-1910

H GREENHOUSES, CIRCA 1902-1958

I POOL AND FOUNTAIN

J ARMORY SQUARE

K TERRACING

L ENTRANCE ROAD UNTIL 1875

M FOUNTAIN AND POOL, CIRCA 1877-1909

N FOUNTAIN (POSSIBLY MEANING A SPRING), CIRCA 1877-1

BLDG. 1 COMMANDING OFFICER'S HOUSE BUILT 1845 -1847

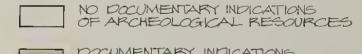
Q SOLOMON HOTON'S STORE R FOUNTAIN, CIRCA 1851

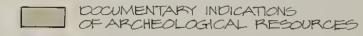
BLDG. 10 MASTER ARMORER'S HOUSE BUILT 1833, MOVED 1880

O SCHOOLHOUSE P PAY OFFICE

S "CATHOLIC LOT"
T ROSE ARBOR

- BLDG. 13 MAIN ARGENAL: BUILT 1845-1850
- BLDG. 17 PAYMAGTER'S QUARTERS: BUILT 1833, MOVED 1880, DESTROYED 1968
- BLDG. 33 GATEHOUSE, 1908, REPLACED HEXAGONAL STRUCTURE IN THE SAME LOCATION





-w- WATERLINE

-- SOFD-- SEWER OR DRAIN

---- NONEXTANT BUILDING SITE



# archeological resources

SPRINGFIELD ARMORY
NATIONAL HISTORIC SITE
UNITED STATES DEPARTMENT OF THE INTERIOR /
NATIONAL PARK SERVICE
458 | 20.004 C

Main Arsenal (Building 13). The arsenal was one of the primary expressions of Lt. Col. James W. Ripley's grand design for the armory. It balances the mass of the college's administration building (building 16) at the opposite end of the green.

Of the structures administered by the National Park Service, this building best illustrates the industrial character of the armory complex. It is a brick warehouse, with large spans and building masses. Only minor modifications have been made to the building form.

Commanding Officer's House (Building 1). The commanding officer's house was built in 1845 under the direction of Colonel Ripley. It reflects Ripley's influence and his conception of the role and significance of the armory. The brick structure is in the Classic Revival style of the Federal period, and it has been modified.

Gatehouse (Building 33). Located adjacent to the gate on the corner of State and Byers streets, this brick building was built in 1908 to replace an earlier octagonal gatehouse.

Garage (Building 18). This two-bay brick structure adjacent to the commanding officer's house was built in 1937 by the Works Project Administration.

<u>Iron Fence</u>. The fence surrounding Armory Square was designed during the administration of Colonel Ripley and construction began in 1847. Iron for the fence came primarily from melted cannon tubes.

### Resources Administered by Springfield Technical Community College

The cooperative agreement between the National Park Service and Massachusetts defines the means for preserving the historic scene within the national historic site. The locations of structures and sites are indicated on the Existing Conditions map. Several specific resources are significant and relevant to the interpretation of the military and industrial character of the armory complex.

Administration (Building 16). This building is comprised of three separate historic buildings: the administration building (built in 1819) and the flanking north and south shops (both built in 1824). During the Civil War, the three buildings were joined and a third story was added to each. The five-story square tower was also added to the west facade of the administration building, and the five-columned Doric portico was installed on the east facade.

<u>West Arsenal (Building 11)</u>. This brick building is the oldest existing building (1807-1808) within the national historic site. Originally only two stories tall, a third story was added in 1863. Throughout its history, it was used for finishing musket barrels and as a storehouse, a recreation hall, and a barracks.

Officers' Quarters (Buildings 5 and 6). The double officers' quarters were built in 1870 in the Second Empire style. The main block (brick with slate roof) is three stories, and a one-story service well extends to the rear. A wide balustrade porch with copper roof spans the three-bay entrance facade.

The Green. Sometimes known as the parade, this vast expanse of grass dotted with trees forms the heart of Springfield Armory. It is the site of the training field used during the Revolution and the first government barracks, shops, storehouses, and powder magazine. The college has removed the majority of trees from the east side of the green to provide athletic fields. On the west side the linear, formal arrangement of the plantings can be detected within the current, more naturalistic planting. The green reflects the evolution of landscape design philosophy. Its role is central to the original classic layout of the armory buildings.

Master Armorer's House (Building 10). Building 10 and its mirror twin, building 17, first flanked the original commanding officer's house and then the main arsenal, accentuating the symmetry of Armory Square. The Greek Revival houses were moved around 1880 to the northwest corner of the green, where building 10 remains today. Building 17 was demolished by Springfield Technical Community College to make room for new construction.

The Long Storehouse or Caserne (Building 19). This long brick structure, built in 1863, had soldiers quarters on the second floor and a horse stable on the ground floor. The stable area was uniquely efficient, with good floors, wide stalls, and a system of chutes to make cleaning easier. The caserne is believed to be the finest remaining example of this building type in the United States.

Test Range (Building 28a). This concrete belowgrade structure reflects the manufacturing and testing function, which was the backbone of the armory complex.

### NATURAL RESOURCES

### Topography

The topography of the historic site is typical of the uplands along the Connecticut River. In the vicinity of Springfield, the river basin extends up to a series of subdued hills on both sides of the broad terraced river valley to the enclosing uplands. The Connecticut River and tributary floodplains are well below the national historic site.

The Connecticut River flows through a Triassic lowland that is underlain by shale, sandstone, and conglomerate, with interbedded basalt and diabase flows usually known as trap rock. The Triassic rocks have been faulted and tilted so that subsequent erosion has removed the weaker sediments, leaving the trap rock standing out in prominent ridges above the eroded hills to form the major topographic features of the region.

BYERS-PEA STREETS O

> FEDERAL STREET NORTH GATE

MAIN COLLEGE GATE

### BUILDINGS

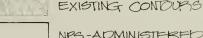
- C.O'S HOUSE
- 5 OFFICERS' QUARTERS 6 OFFICERS' QUARTERS
- N.C.O. QUARTERS
- N.C.O. QUARTERS
- N.C.O. QUARTERS
- 10 MASTER ARMORER'S HOUSE
- WESTARSENAL
- 12 GUARDHOUSE
- 13 MAIN ARGENAL
- 14 MIDDLE ARGENAL
- 15 STOREHOUSE
- 16 ADMINISTRATION
- C.O.'S GARAGE
- 19 LONG STOREHOUSE
- 20 INSPECTION & SHIPPING
- 21 MAINTENANCE
- 25 RESEARCH & ENGINEERING
- 27 SHOP
- 28 BALLISTICS
- 28a TEST BANGE
- 29 GARAGE
- 32 RESEARCH & ENGINEERING
- 33 GATEHOUSE 35 MAINTENANCE

### SIGNIFICANT FEATURES

- A HAY ROAD
- B C.O.'S GARDENS
- POSE APBOR SITE
- D BUILDING 105TE (BUILT 1833-MOVED 1880)
- POOL & FOUNTAIN SITE
- TENNIS COURT
- G BULDING 17 SITE (BUILT 1833, MOVED 1871, DESTROYED 1960)
  H STEEPENED SLOPES

- I PARKING





NPS-ADMINISTERED AREA

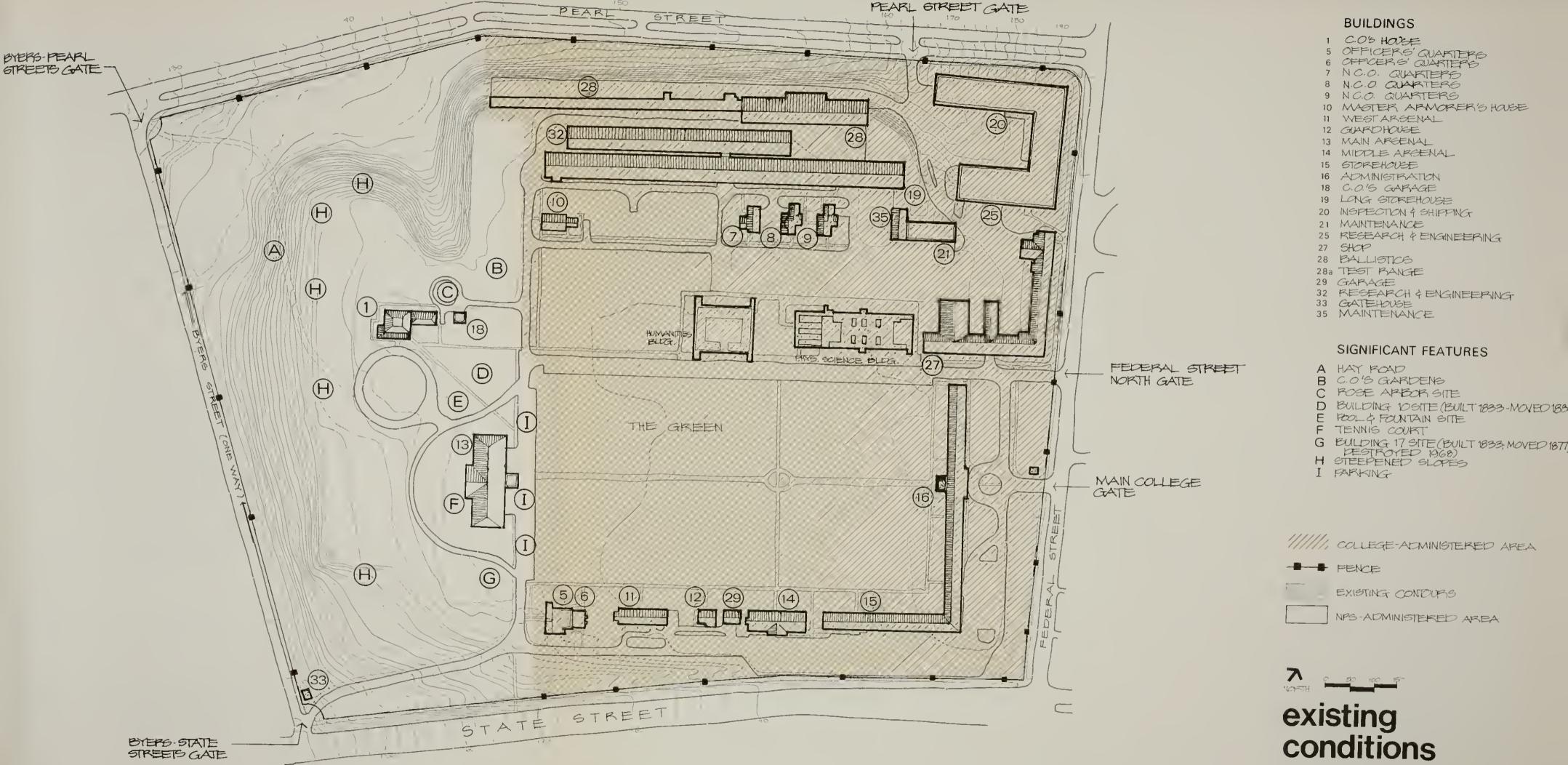


### existing conditions

SPRINGFIELD ARMORY NATIONAL HISTORIC SITE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

458 20,0038



SPRINGFIELD ARMORY NATIONAL HISTORIC SITE

UNITED STATES DEPARTMENT OF THE INTERIOR / NATIONAL PARK SERVICE

The topography of the basin has been modified by glaciation, which scraped the tops from the bedrock hills and filled the valleys with glacial detritus. Glaciers, however, apparently caused little diversion of drainage flow in the Connecticut Basin. The major effect of the glacial fill in the valleys was to raise the streams from their old beds, thereby permitting the development of present channels that have little or no relation to the underlying configuration of the old valley in the bedrock. Wetlands and poor drainages are commonly associated with glacial areas; however, no wetlands are near or within the national historic site.

### Soils

Soils consist of a series of nonhomogeneous sand deposits overlying varied silt and clay deposits on a basal till layer resting on Triassic sandstone. Because the silt and clay soften when stress-relieved and exposed to free water, such as rain or inflowing groundwater, special techniques must be considered for any construction project. The soils are also very susceptible to vibrations when stress-relieved. Steep slopes are likely to erode.

### Plant and Animal Life

The site has been extensively landscaped or altered. According to Kuchler (1964), naturally occurring vegetation contains three potential climax plant communities: the northern hardwoods type, with sugar maple, yellow birch, beech, and hemlock being the dominant trees; the Appalachian oak forest, with white oak and northern red oak as dominant; and a transition type, with trees of both communities. Other trees include elm, walnut, various oaks and maples, and white pine. With the exception of wet meadow areas at the base of the steep slope and the marshy ravine to the north of the commanding officer's house, the armory grounds consist of lawns and trees, giving the appearance of a city park. Most of the trees are native to the region. There are no known rare or endangered plant species at the historic site.

Birds common to Springfield's urban parks include juncos, chickadees, robins, crows, starlings, and pigeons. Small mammals, including squirrels, rats, and mice, can be found within Armory Square.

### Climate

Springfield has a continental climate, at times modified by maritime weather from the Atlantic Ocean, with pleasant summers and moderately cold winters.

Prevailing westerly winds shift to the southwest in summer and to the northwest in winter. Summer temperatures average 72° F, with afternoon maximums in the low 80s and night minimums in the low 60s. Temperatures December through February average 29° F.

Precipitation, which is slightly higher in summer than winter, averages almost 47 inches annually. Summer rains are brief, with thunderstorms most frequent in June and July. Fall and winter precipitation may be augmented by occasional coastal storms ("northeasters"), and more rarely by fall tropical storms from the South Atlantic. Seasonal snowfall varies widely, with an average of 13 inches.

### Air Quality

Springfield is included in the Hartford-New Haven-Springfield interstate air quality control region. The Massachusetts Department of Environmental Quality Engineering monitors pollution levels within the region and reports these findings to the Environmental Protection Agency.

Based on air pollution conditions, that agency assigns a priority for each of five pollutants: sulfur dioxide, total suspended particulates, carbon monoxide, photochemical oxidants, and nitrogen dioxide. Three priority levels, as described below, have been established for these pollutants:

The Springfield region is classified as priority I for sulfur dioxide, total suspended particulates, carbon monoxide, and photochemical oxidants. It is rated as priority III for nitrogen dioxide.

The Clean Air Act amendments of 1977 require that federal facilities comply with state regulations and that they maintain records about emissions.

### THE PARK AND ITS ENVIRONS

### Regional Setting

The city of Springfield lies on the banks of the Connecticut River, in a scenic valley known as the Connecticut or Pioneer Valley. The city's elevation ranges from 75 to 243 feet. The hills around the city include the Wilbraham Range to the east, the Holyoke Range to the north, and the foothills of the Berkshires to the west. The surrounding countryside, only a 15-minute drive from the city, is predominantly rural.

Springfield is a transportation hub lying at the crossroads of New England. Major north-south and east-west interstate highways and national rail lines pass through the city. Several bus lines provide frequent service to points throughout the Northeast. Bradley International Airport, also serving Hartford, Connecticut, is 18 miles away and offers passenger service to many destinations.

### Land Use

Land use patterns developed as a result of topography, community needs, and economic trends. In the first half of the 19th century, a rail line was built along the Connecticut River, and an intersecting line that crossed the river was built between Boston and Albany. Industry grew up along the rail lines and established Springfield as the commercial center of the region.

Springfield experienced an economic boom at the same time that a grand design for the armory was being developed. This was also a time of industrial innovation, fostered by research at the armory. Rapid growth downtown soon filled available land with commercial and industrial establishments. The areas north and east of the armory grounds were also soon occupied primarily by industrial development.

Springfield has experienced many of the urban problems common across the country, but the late 1970s and early 1980s have witnessed a renewed interest in the city center and the development and rehabilitation of neighborhoods surrounding the armory. Local historical societies and the city have been working with private developers to renovate and reuse existing historic structures wherever possible to maintain the historic character of the city. They have also been working with federal agencies to get community block grants to help in the redevelopment. The neighborhoods to the south and east of Armory Square are being redeveloped mainly for housing, those to the north are being rehabilitated for industrial purposes, and the downtown area to the west is seeing a variety of reuse, including residential and commercial. A complete description of Springfield's planning and redevelopment effort is contained in the city's 1978 planning document, It's Time for Springfield.

### Socioeconomic Characteristics

Springfield is the urban center of western Massachusetts. A city of almost 153,000, it is the third largest city in the state, and it forms the center of a metropolitan area approaching 550,000 people.

Springfield's industrial reputation was originally established by the armory. From revolutionary muskets to modern M-1s and M-14s, the "Springfield rifles" were synonymous with quality, precision, and craftsmanship. Springfield also became a booming and highly diversified industrial center. The first practical push-lawnmower, the first American-built automobile, and the first motorcycle were all created in Springfield around the turn of the century. Today, a variety of companies--Friendly (ice cream), Milton Bradley (games), G. & C. Merriam (dictionaries), Breck (shampoo), Buxton (leather goods), Monsanto (chemicals), Digital (computers), and Smith & Wesson (small arms)--reinforce Springfield's image as a preeminent manufacturing center.

### Recreation Resources

The Springfield region abounds in recreational opportunities provided by its abundant rivers and lakes, by the Berkshire, Holyoke, and Wilbraham mountains, and by its rich cultural history. Several state parks and forests are within an hour's drive of the city. Mount Tom and Mount Holyoke state parks are the most popular, and both provide numerous recreational pursuits, with Mount Tom offering snow skiing and an amusement park. Laughingbrook Natural Preserve and Arcadia Wildlife Preserve, both operated by the Massachusetts Audubon Society, have become popular with those interested in nature study, hiking, and picnicking. The region also has many cultural attractions, including the re-created Sturbridge Village (often compared to Williamsburg), the Warehouse Point Trolley Museum, and the Old Newgate Prison in nearby Connecticut. Tanglewood, which is located in the Berkshires, is popular during the summer for concerts, dance performances, and plays.

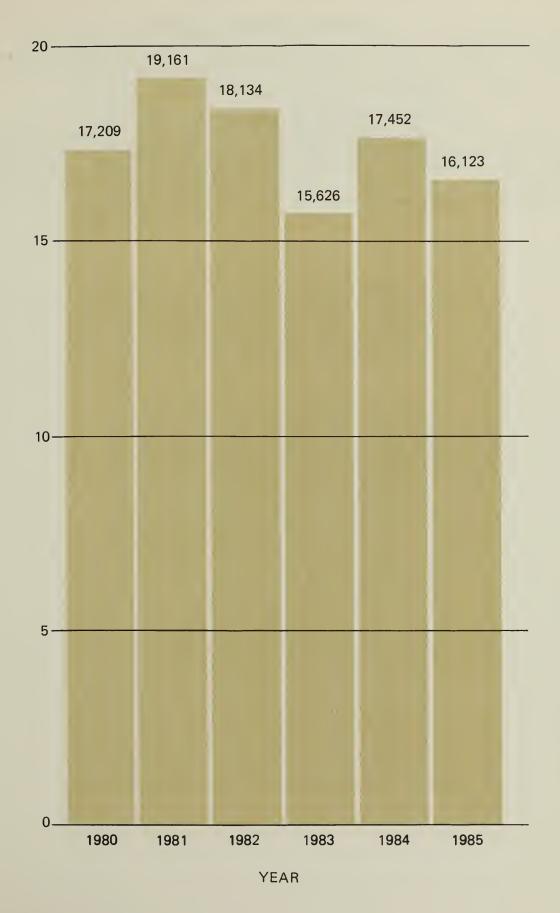
The city of Springfield is noted for its Quadrangle, which contains the Museum of Fine Arts, the George Walter Vincent Smith Art Museum, the Springfield City Library, the Connecticut Valley Historical Museum, and the Science Museum. Springfield is the home of the Naismith Memorial Basketball Hall of Fame, which tells the history of basketball from its beginning in Springfield to the present. Just across the river is the Eastern State Exposition grounds, the home of the largest fair in the Northeast. Two other popular areas are Forest Park and Riverfront Park, on the Connecticut River just west of downtown. Plans are underway to construct a new Basketball Hall of Fame building adjacent to Riverfront Park. This would create an excellent opportunity to tie Springfield Armory National Historic Site in with the nearby downtown attractions of the Quadrangle and Riverfront Park.

#### VISITOR USE OF THE HISTORIC SITE

Annual visitation to the national historic site has averaged around 17,000 for the past six years. The peak year was 1981, when 19,100 people visited the armory (see bar graph). The most recent visitor data indicate that June, July, and August are the peak months. One half of the park's total visitation occurs on weekends, and the rest is distributed throughout the week.

Family groups comprise approximately half of the annual visitation, and individuals, peer groups, and organized groups most of the other half. Handicapped, minority, and international visitors account for less than 2 percent of total visitation per year.

Arms enthusiasts are considered a special audience, and they generally spend three to four hours in the museum, compared to casual tourists who generally spend about an hour touring the museum. In addition, some 20 to 30 times a month requests are made for specialized services, such as access to files, the library, and the study collection.



More than half of the visitors are estimated to be from out-of-state. This is reflected in the origin of automobile traffic: 20 percent local, 20 percent in-state, and 60 percent out-of-state. Most visitors reach the park by car, and daily car counts range from 15 to 25 vehicles. There are usually no more than five cars at any one time.

Future visitation to Springfield Armory may be influenced by the construction of the new Basketball Hall of Fame on the Connecticut River near the downtown area. Local officials are projecting that visitation to the new facility, as well as to the downtown area, will increase dramatically. There would likely be a spillover effect on visitation to Springfield Armory because it is so near the downtown area.

## APPENDIX A: LEGISLATION

### **Springfield Armory**

An Act to provide for the establishment of the Clara Barton National Historic Site, Maryland; John Day Fossil Beds National Monument, Oregon; Knife River Indian Villages National Historic Site, North Dakota; Springfield Armory National Historic Site, Massachusetts; Tuskegee Institute National Historic Site, Alabama; Martin Van Buren National Historic Site, New York; and Sewall-Belmont House National Historic Site, Washington, District of Columbia; and for other purposes. (88 Stat. 1461) (P.L. 93-486)

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

#### TITLE I

SEC. 101. (a) Unless otherwise provided hereafter, the Secretary of the Interior (hereinafter referred to as the "Secretary") is authorized to acquire by purchase with donated or appropriated funds, donation, exchange, or by transfer from another Federal agency such lands and interests in lands as hereafter provided for establishment as units of the national park system, as follows:

\* \* \* \* \* \* \*

(4) for establishment as the Springfield Armory National Historic Site, Massachusetts, those lands depicted on the map entitled "Boundary Map, Springfield Armory National Historic Site, Massachusetts", numbered NHS-SPAR-91,003 and dated January 1974, the oldest manufacturing arsenal in the United States: *Provided*, That the historic site shall not be established unless an agreement is executed which will assure the historical integrity of the site and until such lands as are needed for the historic site are donated for this purpose.

(b) The Secretary may also acquire personal property associated with the areas referred to in subsection (a) of this section. Lands and interests therein owned by a State or any political subdivision thereof which are acquired for the purposes of subsection (a) of this section

may be acquired only by donation.

SEC. 102. (a) When the Secretary determines that an adequate interest in lands has been acquired to constitute an administrable unit for each of the areas described in section 1 of this Act, he may, after notifying the Committees on Interior and Insular Affairs of the United States Congress of his intention to do so at least fourteen days in advance, declare the establishment of such unit by publication of a notice to that effect in the Federal Register. Such notice shall contain a map or other description of the boundaries of the unit, together with an explanation of the interests acquired and the costs in cident thereto. The Secretary may refrain from acquiring

property for establishment of any unit authorized by this Act where, in his judgment, satisfactory agreements or donations with respect to properties which are needed for the protection and administration of a particular unit have not been consummated with the owners of such

properties.

(b) Pending the establishment of each unit and, thereafter, the Secretary shall administer the property acquired pursuant to this Act in accordance with the provisions of the Act of August 25, 1916 (39 Stat. 535), as amended and supplemented, and, to the extent applicable, the provisions of the Act of August 21, 1935 (49 Stat. 666), as amended.

SEC. 104. There are authorized to be appropriated such sums as may be necessary to carry out the provisions

of this Act, not to exceed, however, the following:

(d) Springfield Armory National Historic Site, 5,300,000 for development:

Approved October 26, 1974.

# APPENDIX B: LETTER FROM SPRINGFIELD TECHNICAL COMMUNITY COLLEGE

Springfield Technical Community College

ONE ARMORY SQUARE, SPRINGFIELD, MASSACHUSETTS 01105 . TELEPHONE: (413) 78+7822

July 1, 1983 DA-0-83-484

Mr. Herbert S. Cables, Jr. Regional Director
National Park Service
15 State Street
Boston, MA 02109

Dear Mr. Cables:

Springfield Technical Community College has enjoyed working with the National Park Service in preparing the draft General Management Plan for Springfield Armory National Historic Site. The course of action proposed by this plan is consistent with the educational needs of this institution while also preserving the Site's historic character and values. It is clear that the proposed plan will help both of us in carrying out our individual responsibilities in administering the Site.

I understand that the next step is to submit this document to various State and Federal agencies as well as the public in Springfield for review. Please be assured of our continued support as we bring this planning process to a satisfactory conclusion.

Sincerely yours,

William A. Baker,

Dean of Administrative Services

WAB/kr

cc: President Collamore

President-Elect Scibelli W. Douglas Lindsay, Jr.

## APPENDIX C: FINDING OF NO SIGNIFICANT IMPACT



IN REPLY REFER TO

D-18

# United States Department of the Interior

#### NATIONAL PARK SERVICE

Springfield Armory National Historic Site
One Armory Square
Springfield, Massachusetts 01105

June 6, 1986

Memorandum

To: Regional Director, NAR

From: Superintendent, Springfield Armory NHS

Subject: Record of Decision, Finding of No Significant Impact,

General Management Plan, Springfield Armory National

Historic Site

#### BACKGROUND

In April 1968, Springfield Armory was deactivated as a military installation and the 55-acre Armory Square portion of the facility was conveyed to the Commonwealth of Massachusetts and to the City of Springfield. The property administered by the Commonwealth serves as the campus of Springfield Technical Community College (STCC). Springfield Armory Museum, Inc., a non-profit organization, leased a portion of the City's property and managed the Springfield Armory Museum from 1968 to 1977. Other portions were used as athletic fields by the City of Springfield Public School System.

As a result of public hearings and reports conducted by the U.S. Senate and those by the House of Representatives, Congress authorized establishment of Springfield Armory NHS (Public Law 94-486) in October 1974. The legislation required that a cooperative agreement between the National Park Service (NPS) and the Commonwealth of Massachusetts be effected to ensure the environmental and historical integrity of the lands and historic structures that would remain under State control. STCC, a community college within the State's system of higher education, serves as the primary representative for the Commonwealth. The entire 55 acre area of Armory Square is a National Historic Landmark.

The National Park Service assumed management direction of the non-State owned portion of the Site (18+ acres) in 1977 through informal agreement with the Board of Directors of Springfield Armory Museum Inc., and the City of Springfield. The Cooperative Agreement with the Commonwealth of Massachusetts required by the legislation for establishment of the Site was finally effected on March 27, 1978. The Denver Service Center was then asked to prepare a Development Concept Plan (DCP) to serve as the basic planning document for the

Site. After meetings with park and regional office staff and data collection from interested local publics and agencies, a preliminary draft DCP and environmental assessment (EA) was distributed for internal review in December 1979. The preliminary draft was revised but never approved. Work was renewed on the draft GMP in 1983 and a document in the form of a draft GMP/DCP/EA (copy enclosed) was made available for public review in September 1984.

Compliance with Section 106 of the National Historic Preservation Act of 1966, as amended, has been initiated by the North Atlantic Regional Office among the National Park Service, the Massachusetts State Historic Preservation Officer and the Advisory Council on Historic Preservation pursuant to terms of the 1981 Programatic Memorandum of Agreement.

No physical implementation of any plan features would be undertaken until Section 106 compliance is complete and any mitigation can be carried out.

Public response to the draft review was positive, though limited. Public comment received (see enclosures) indicated preference for the more expansive development plan (Alternative 2). The proposed action incorporates much of Alternative 2 and better provides for visitor safety and park security.

# Description of Selected Alternative

The Proposed Action of the final GMP is to maintain the NPS administered portion of Springfield Armory as it was in 1968 when it was deactivated as a military installation. Conditions of the landscape and historic structures existing in 1968 will be reestablished and maintained.

The primary structural elements of the scene - the Main Arsenal, Commanding Officer's House, and Garage will all be preserved with continued adaptive uses. Associated elements such as the gatehouse, walks and paths and fence will be stabilized, maintained, and made available for interpretation as needed.

The proposed landscape treatment also reflects the baseline 1968 date. Modifications of slopes altered into athletic fields after 1968 would serve to reduce recent erosion and to more closely resemble the historic terraced bluff. To further reduce erosion and restore the scene, trees will be planted in historic configurations according to historic planting maps of the armory grounds.

Interpretation under the proposal would provide for joint implementation with STCC of an interpretive marker program (wayside exhibits) for significant historic structures throughout Armory Square. Interpretive exhibits will be provided, in phases, inside the Main Arsenal in response to visitor use. As this is the middle range alternative its costs total between the other two alternatives.

Overall, the proposed action would have the positive impacts of protecting and preserving the cultural resources of Springfield Armory National Historic Site. It would also ensure the preservation of the structures and landscape for visitor use and enjoyment.

# Alternative 1: Continuation of Existing Conditions (No Action)

Under Alternative 1, existing conditions, current management policies, and funding levels would be continued. This implies ongoing maintenance and interpretation at existing levels, but it does not extend to the rehabilitation of deteriorating structures. Although no additional programs or construction would be undertaken, the National Park Service would stabilize and maintain the properties under its jurisdiction that are listed on the National Register of Historic Places, as required by law. This alternative continues existing management levels and has the correspondingly lowest cost of the three alternatives.

The no-action alternative would provide the minimum level of stabilization and some preservation and interpretation of park resources. Although this alternative would resolve some existing management problems, it would leave others unsolved.

# Alternative 2: Selective Restoration and Development

This alternative represents a blend of preservation, selective restoration/reconstruction and adaptive use of certain cultural resources, and the full development of interpretive facilities both on the armory grounds and in the city. This alternative would involve a closer working relationship between the park, the college, the city, and private enterprise. This alternative represents the highest level of development, the highest implementation costs, and the greatest environmental impact.

Alternative 2 would provide for the most extensive development, preservation, and restoration of armory resources. However, the scene that would be created would not be an accurate representation of any past settings.

The development of a new parking lot would be physically disruptive and historically incongruous. This parking lot would physically and visually intrude on the integrity of the site by creating parking where it never existed historically. In addition, the historic fence would have to be altered, and an existing grassy area would be removed. Some visitors could have difficulty with the long, uphill walk from the parking lot to the main arsenal, and access to the parking area from Byers Street would be difficult to find and circuitous. Traffic circulation in the area would also be adversely affected because Byers Street is narrow and cannot carry a large volume of traffic. Also, the busy intersections of Byers and State Streets and Byers and Pearl Streets could become more congested because of visitor traffic to the armory.

# Rational for Decision

The selected Alternative described above was picked because it best meets the resource preservation needs of Springfield Armory National Historic Site. This alternative most accurately, and with the least negative impacts on the historic fabric, depicts the continuum of history that has brought Springfield Armory to its final configuration. The plan allows optimum use of the Site's resources to explain the role of Armory in the country's history as well as its role in the development of the City of Springfield, Massachusetts and the industrial revolution.

## FINDING OF NO SIGNIFICANT IMPACT

The proposal, as described in the Record of Decision, does not constitute a major federal action which will significantly affect the quality of the human environment as defined in Section 102(2) (c) of the National Environmental Policy Act of 1969 (FP 91-190, 83). Therefore, the National Park Service will not prepare an environmental impact statement for this project.

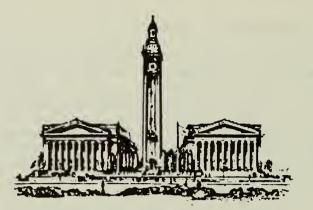
SUPERINTENDENT

CONCURRED:

REGIONAL DIRECTOR NORTH ATLANTIC REGION

Enclosures: Sept 1984 GMP/DCP/EA

Letters of Public Comment (2)





COMMUNITY DEVELPOMENT 36 Court St., Rm. 222 Springfield, MA 01103 (413) 787-6108

THE CITY OF SPRINGFIELD, MASSACHUSETTS

October 16, 1984

Mr. W. Douglas Lindsay Jr., Superintendent SPRINGFIELD ARMORY NATIONAL HISTORIC SITE One Armory Square Springfield, Massachusetts 01105

Dear Mr. Lindsay:

The City of Springfield would like to offer its wholehearted endorsement to your Alternative 2 proposal for restoration of the Armory Museum and grounds. Please continue to communicate with us so that we can actively support the proposal at the appropriate time. Thank you for your continuing efforts to coordinate and bring the Gun Museum into the mainstream of our vistor and convention activities.

Very traly yours,

Community Development

D

cc - Congressman Edward P. Boland



18 October 1984

W. Douglas Lindsay, Jr.
Superintendent
Springfield Armory National Historic Site
One Armory Square
Springfield, Massachusetts 01105

Dear Mr. Lindsay:

I am writing to submit Springfield Central's formal response to the National Park Service Proposed Development Program for the Springfield Armory. These comments follow a public hearing on the project held Tuesday, September 18; 1984.

Springfield Central, a private, non-profit corporation, is the lead private sector agency responsible for the revitalization of downtown Springfield. Springfield Central, with its public sector partner, the City, is working to achieve the efficient development of the city's numerous, but finite, resources. To date, this combined public/private sector initiative, which began with a 1978 Master Plan, has spurred over \$250 million dollars in public and private sector investment represented in over 20 development projects. Springfield Central's development policy integrates land uses to create an environment for work and leisure. The formula for economic growth in the downtown, therefore, balances business and residential development with urban amenity strategies and cultural planning.

The Springfield Armory is one of Springfield's most valuable cultural assets. Its prominent location on the edge of the City's central business district, adjacent to the Springfield Library and museums at the Quadrangle, heightens the Armory's potential to generate significant tourist activity. At the outset I would like to say that Springfield Central supports the need for and the importance of undertaking a major development program for the Armory to enhance its economic development impact and its contribution to Springfield's cultural community.

SPRINGFIELD CENTRAL INC. 338 WORTHINGTON STREET • SPRINGFIELD, MA 01103 • 413/732/7467

page two W. Douglas Lindsay, Jr. 18 October 1984

In reviewing the National Park Service development program for the Armory, however, Springfield Central feels that the proposed action, a minimum development and preservation plan, does not take full advantage of the Armory's development potential. Springfield Central recommends that the National Park Service reconsider its position and adopt a more ambitious development program. Alternative #2, for example, a selective restoration and development plan that was evaluated as part of the NPS proposal process, is more in keeping with the intent that Springfield Central would like to see guide a development strategy for the Armory.

The issues that are of particular concern are visitor access and parking; and site development.

<u>Visitor Access</u>: It is essential to establish an entrance to the Springfield Armory that is separate from the entrance to Springfield Technical Community College. An entrance designated for exclusive access to the Armory secures the site's identity which is now diffused by a confusing and circuitous entrance through STCC.

Site Development: The restoration of the historic terraces, fountain and gardens and the relocation of the master armor's house to its original site recreates the "Grand National Armory" theme that is the real story of the site. The magnificence of this setting, then, visually underscores the Armory's important role in industrial and military development.

In raising these issues, Springfield Central hopes to encourage further discussion with the National Park Service about the program for the Springfield Armory. Springfield's cultural resources are limited and the Springfield Armory has an as-yet untapped potential to be a major economic generator for the Springfield region.

We are anxious to participate in the development process and are ready to offer any assistance that may be needed.

Carlo A. Marchetti Executive Director

Sincerely,

# SELECTED BIBLIOGRAPHY

- ALLIED SOILS AND FOUNDATION DIVISION, INC.
  - 1969 <u>Greater Springfield Massachusetts</u>. Chicago: Windsor Publications.
  - 1972 "A Foundation Study for Proposed Buildings 12, 14, and 16, Springfield Technical Community College, Springfield, Massachusetts." Design report.
- BAUER, FRANK
  - 1975 <u>At the Crossroads, Springfield, Massachusetts, 1636-1975.</u> Bicentennial Committee of Springfield, Inc.
- ENVIRONMENTAL SCIENCE SERVICES ADMINISTRATION, U.S. DEPARTMENT OF COMMERCE
  - 1969 <u>Climatological</u> <u>Summary</u>, <u>Springfield</u>, <u>Massachusetts</u>. Climatography of the United States, no. 20-19.
- KUCHLER, A.W.
  - Manual to Accompany the Map, "Potential Natural Vegetation of the Conterminous United States." American Geographical Society. Special publication 36.
- NATIONAL PARK SERVICE, U.S. DEPARTMENT OF THE INTERIOR

  1971a "Draft Master Plan, Proposed Springfield Armory National
  Historic Site, Springfield, Massachusetts." Office of
  Environmental Planning and Design, Eastern Service Center.
  - 1971b "Historic Structure Report, Architectural Data, Springfield Armory National Historic Site," by Robert L. Carper. Draft. Denver Service Center.
  - 1976 "Assessment of Alternatives, Public Involvement Workbook and Public Comments, Springfield Armory National Historic Site."
    North Atlantic Regional Office.
  - 1977 "Collection Management Plan, Springfield Armory National Historic Site." Harpers Ferry Center.
  - 1978a "Historic Structure Report, Historical Data/Base Map, Springfield Armory National Historic Site," by John L. Albright. Denver Service Center.
  - 1978b "Interpretive Themes with Possible Exhibits," by W. Douglas Lindsay, Bill Meuse, and Stuart Vogt. Springfield Armory National Historic Site.
  - 1978c "Status Report, Springfield Armory Planning," by Shary Berg. North Atlantic Regional Office.

- 1979 "Statement for Management." Springfield Armory National Historic Site.
- 1980 "Interpretive Prospectus, Springfield Armory National Historic Site." Harpers Ferry Center.
- 1982 "Archeological Survey, Proposed Electrical Line Corridor, Springfield Armory National Historic Site." Denver Service Center.
- 1984 <u>General Management Plan/ Development Concept Plan/ Environmental Assessment, Springfield Armory National Historic Site.</u> Denver Service Center.

#### SPRINGFIELD, MASSACHUSETTS

- 1969 "Community Renewal Plan." Planning Department.
- 1973 "Neighborhood Analysis No. 10, Pearl Planning District." Planning Department.
- SPRINGFIELD, MASSACHUSETTS, AND SPRINGFIELD CENTRAL, INC. 1978 It's Time for Springfield: Rebirth of Downtown.
- U.S. DEPARTMENT OF HEALTH, EDUCATION AND WELFARE
  1976 "Draft Case Report for a Variety of Proposed Actions
  Affecting Armory Square of Springfield Armory, Including
  Demolition and Construction Actions." Federal Property
  Assistance Program 13.606.

# U.S. GENERAL SERVICES ADMINISTRATION

1978 <u>Draft Environmental Impact Statement, Courthouse and Federal Office Building, Springfield, Hampden County, Massachusetts.</u>
Public Buildings Service, Region 1.

## PLANNING TEAM AND CONSULTANTS

# PLANNING TEAM

Lawrence E. Beal Community Planner, Denver Service Center

W. Douglas Lindsay Superintendent, Springfield Armory National Historic Site

Nancy Nelson Landscape Architect, North Atlantic Regional Office

Linda Romola Cultural Resource Planner, Denver Service Center

Pat Shea Regional Liaison, North Atlantic Regional Office

Michael Spratt Outdoor Recreation Planner, Denver Service Center

A. Whit Watkins Outdoor Recreation Planner, Denver Service Center

# CONSULTANTS

John Albright Historian, Denver Service Center

William Baker
Dean of Administration, Springfield Technical Community College

Craig Cellar Cultural Resource Management Specialist, Denver Service Center

Charles Clapper Associate Regional Director, Planning and Resource Preservation, North Atlantic Regional Office

Dave Clark Chief, Environmental Compliance, North Atlantic Regional Office

Larry Lowenthal Chief, Visitor Services, Springfield Armory National Historic Site

Dick Hsu Regional Archeologist, North Atlantic Regional Office Bill Meuse Curator, Springfield Armory National Historic Site

Dwight Pitcaithley Regional Historian, North Atlantic Regional Office

Robert Rothweiler Environmental Specialist, Denver Service Center

Terry Savage Chief, Branch of Planning and Design, North Atlantic Regional Office

Richard Turk Historical Architect, Denver Service Center

William Witmer Project Manager, Denver Service Center

Richard Wittpenn Former Chief, Branch of Planning, Mid-Atlantic/North Atlantic Team, Denver Service Center

As the nation's principal conservation agency, the Department of the Interior has basic responsibilities to protect and conserve our land and water, energy and minerals, fish and wildlife, parks and recreation areas, and to ensure the wise use of all these resources. The department also has major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

Publication services were provided by the graphics and editorial staffs of the Denver Service Center. NPS D-6A, August 1986

